Canadian Nuclear Safety Commission

2015–16

Departmental Performance Report

The Honourable Jim Carr, P.C., M.P.
Minister of Natural Resources

Canadian Nuclear Safety Commission
2015–16 Departmental Performance Report

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President's Message

As President of the Canadian Nuclear Safety Commission (CNSC), it is my pleasure to present our *2015–16 Departmental Performance Report*, particularly as we mark the 70th anniversary of safe nuclear regulation in Canada.

Over the past year, we have continued to implement our Strategic Planning Framework, which sets out clearly defined goals and priorities, to guide our efforts in dealing with the changes taking place in the nuclear sector. As the CNSC is the sole regulator responsible for all nuclear activities in Canada, it is important that our work reflects and anticipates the needs of a changing industry, and that we continue to ensure the safety of Canadians and the environment.

In the past year, the CNSC's work focused on five main priorities, which are outlined in greater detail throughout this report:

- Regulatory oversight of the nuclear industry
- Modern nuclear regulation
- Trusted regulator
- Global nuclear influence
- Improving management effectiveness

In pursuit of these five priorities, the CNSC completed a number of major licensing activities over the past year. These activities included a public hearing in 2015 for the renewal of the power reactor operating licence for the Bruce A and B Nuclear Generating Station and the Darlington Nuclear Generating Station, a public hearing in 2015 for the renewal of the Class 1B nuclear substance processing facility operating licence for Nordion (Canada) Inc.'s facility and for SRB Technologies (Canada) Inc.'s gaseous tritium light source facility. As well, a public hearing was held in 2015 to remove the Gunnar Remediation Project Phase 2 hold point as it pertained to the remediation of the tailings deposits at the Gunnar Legacy Uranium Mine Site in Northern Saskatchewan. Additionally, the joint review panel report on Ontario Power Generation's Deep Geologic Repository was submitted to the Minister of Environment for decision, and an export licence was granted for Canada's first uranium shipment to India.

In October 2015, an international team of experts and the International Atomic Energy Agency (IAEA) completed an International Physical Protection Advisory Service (IPPAS) mission to review national nuclear security practices in Canada, following a commitment Canada made at the 2014 Nuclear Security Summit in the Hague, Netherlands. The IPPAS team concluded that

Canada conducts strong and sustainable nuclear security activities, and the team identified a number of good practices in the national nuclear security regime.

The CNSC completed the remaining Fukushima Action Items (FAIs), following the Fukushima event of 2011, as specified in the *CNSC Integrated Action Plan On the Lessons Learned From the Fukushima Daiichi Nuclear Accident*.[i]

In addition to these large initiatives and special projects, the bulk of our work entails day-to-day oversight of nearly 1,700 licensees, to ensure the continued safety of all nuclear activities in Canada. In support of this work, we continued efforts on our 10-year workforce renewal plan. These efforts included identifying critical competencies for regulatory work, addressing attrition risks in our workforce, re-profiling the organization to ensure growth and development opportunities, and recruiting a talent pool of new graduates.

The CNSC remains committed to promoting a healthy safety culture that encourages professional and respectful scientific debate. The CNSC is a science-based organization which fosters a working environment that encourages staff to communicate their best professional judgments. The ability to raise issues is an important element of a healthy safety culture.

Our ongoing efforts and commitment to safety are reflected in the Canadian nuclear industry's excellent safety record. Our goal is to maintain this success as we continue to strive toward being the best nuclear regulator in the world.

Michael Binder
President

Results Highlights

2015-16 Departmental Actual Spending (dollars):

$137,968,668

2015-16 Departmental Actual Full Time Equivalents (FTEs):

808

Highlights:

- Renewed Bruce Power's operating licence
- Renewed Ontario Power Generation's Darlington operating licence
- Issued an export licence for Canada's first uranium shipment to India
- Facilitated completion of an International Physical Protection Advisory Service mission
- Completed all Fukushima Action Items following the Fukushima event of March 2011
- Renewed the Class 1B nuclear substance processing facility operating licences for Nordion (Canada) Inc.'s facility and for SRB Technologies (Canada) Inc.'s gaseous tritium light source facility
- Held a public hearing in 2015 to remove the Gunnar Remediation Project Phase 2 hold point as it pertained to the remediation of the tailings deposits at the Gunnar Legacy Uranium Mine Site in Northern Saskatchewan
- Completed core licensing, compliance and verification activities
    - conducted 1,450 inspections (not including desktop reviews) for nearly 2,400 licences held by almost 1,700 licensees
    - managed over 3,000 CNSC certificates held by persons across Canada who are key operating personnel for power and research reactors, health physicists and radiation safety officers, and industrial radiography exposure device operators
- issued 23 orders to specific licensees using nuclear substances and 5 administrative monetary penalties (3 to the industrial sectors, 1 to a nuclear power plant, and 1 to an individual) – additional information is available in the CNSC's *2015–16 Annual Report*[ii]

Section I: Organizational Overview

Organizational Profile

Appropriate Minister: Jim Carr

Institutional Head: Michael Binder

Ministerial Portfolio: Natural Resources Canada[iii]

Enabling Instrument(s): *Nuclear Safety and Control Act*[iv]

Year of Incorporation / Commencement: 2000

Organizational Context

Raison d'être

The Canadian Nuclear Safety Commission (CNSC) was established on May 31, 2000, with the coming into force of the *Nuclear Safety and Control Act* (NSCA). It replaced the Atomic Energy Control Board established in 1946 by the *Atomic Energy Control Act*.

The CNSC is a departmental corporation listed in Schedule II of the *Financial Administration Act*[v], and reports to Parliament through the Minister of Natural Resources.

Mission

The Canadian Nuclear Safety Commission regulates the use of nuclear energy and materials to protect health, safety, security and the environment; to implement Canada's international commitments on the peaceful use of nuclear energy; and to disseminate objective scientific, technical and regulatory information to the public.

Mandate

Under the NSCA, the CNSC:

- regulates the development, production and use of nuclear energy in Canada to protect health, safety and the environment
- regulates the production, possession, use and transport of nuclear substances, and the production, possession and use of prescribed equipment and prescribed information

- implements measures respecting international control of the development, production, transport and use of nuclear energy and substances, including measures respecting the non-proliferation of nuclear weapons and nuclear explosive devices
- is responsible for disseminating objective scientific, technical and regulatory information concerning the CNSC's activities, and about how the development, production, possession, transport and use of nuclear substances affect the environment and the health and safety of persons

Responsibilities

The CNSC is an independent regulatory agency and quasi-judicial administrative tribunal. It provides regulatory oversight of all nuclear-related activities and substances in Canada.

Environmental protection is a key element of the CNSC's mission and mandate. As the sole responsible authority for nuclear projects under the *Canadian Environmental Assessment Act, 2012*[vi] (CEAA 2012), the CNSC carries out environmental assessments in accordance with this legislation. For nuclear projects that no longer require environmental assessments under CEAA 2012, the CNSC continues to ensure the public and environment are protected through environmental assessments under the NSCA. The CNSC is also responsible for designating installations under the *Nuclear Liability Act*.[vii] Additional discussion of the new *Nuclear Liability and Compensation Act*[viii] can be found in Section III, Internal Services.

The CNSC is Canada's authority for the implementation of nuclear safeguards, as set out in the *Agreement Between the Government of Canada and the International Atomic Energy Agency for the Application of Safeguards in Connection With the Treaty on the Non-Proliferation of Nuclear Weapons ("Safeguards Agreement")*[ix] and the associated *Additional Protocol*.[x] The CNSC also administers the nuclear non-proliferation provisions of bilateral nuclear cooperation agreements between the Government of Canada and foreign nuclear trading partners, pursuant to the requirements of Canada's nuclear non-proliferation policy.

The Commission has up to seven permanent members, appointed by the Governor in Council, and is supported by CNSC employees across Canada. The President of the CNSC is a full-time Commission member, while other members may be appointed to serve on a full- or part-time basis. Temporary members can also be appointed by the Governor in Council, as required. Commission members are chosen according to their credentials, and are independent of any political party, government, industry or special interest group.

In addition to being a regulatory organization, the Commission is an administrative tribunal set up at arm's length from government. The Commission makes most decisions through a public hearing process that is guided by clear rules of procedure.[xi] Interested parties and members of the

public may be heard at proceedings of the Commission. Proceedings are periodically held in communities close to major nuclear facilities to make them as accessible as possible to affected persons. Additionally, the Participant Funding Program is available to support Aboriginal and public participation in these proceedings.

The Commission provides extensive reasons for its decisions which are based on scientific information that often includes public input as well as the recommendations of expert CNSC staff. Decisions, hearing transcripts, webcast archives and CNSC Online resource modules are publicly available on the CNSC website and various social media platforms. By joining the Twitter platform, the Commission has an additional tool to inform the public about important Commission decisions, press releases and news about the CNSC's participation in events or conferences.

Strategic Outcome(s) and Program Alignment Architecture

The following illustrates the CNSC's strategic outcome, as well as the complete framework of programs and sub-programs that support it.

1. **Strategic outcome:** Safe and secure nuclear installations and processes used solely for peaceful purposes and an informed public on the effectiveness of Canada's nuclear regulatory regime.
    - 1.1 **Program:** Nuclear Fuel Cycle
        - 1.1.1 **Sub-Program:** Uranium Mines and Mills
        - 1.1.2 **Sub-Program:** Nuclear Processing Facilities
        - 1.1.3 **Sub-Program:** Nuclear Waste Management Facilities
    - 1.2 **Program:** Nuclear Reactors
        - 1.2.1 **Sub-Program:** Nuclear Power Plants
        - 1.2.2 **Sub-Program:** Research Reactors
    - 1.3 **Program:** Nuclear Substances and Prescribed Equipment
        - 1.3.1 **Sub-Program:** Medical Sector
        - 1.3.2 **Sub-Program:** Industrial Sector
        - 1.3.3 **Sub-Program:** Commercial Sector
        - 1.3.4 **Sub-Program:** Academic and Research Sector
        - 1.3.5 **Sub-Program:** Packaging and Transport
        - 1.3.6 **Sub-Program:** Dosimetry Services
    - 1.4 **Program:** Nuclear Non-Proliferation
        - 1.4.1 **Sub-Program:** Domestic and International Arrangements
        - 1.4.2 **Sub-Program:** Safeguards
        - 1.4.3 **Sub-Program**: Import and Export
    - 1.5 **Program:** Scientific, Technical, Regulatory and Public Information
        - 1.5.1 **Sub-Program:** Regulatory Framework
        - 1.5.2 **Sub-Program:** Scientific and Technical Information
        - 1.5.3 **Sub-Program:** Research
        - 1.5.4 **Sub-Program:** Public Engagement and Outreach

    Internal Services

Operating Environment and Risk Analysis

For 2015–16, the CNSC identified the key risk of a changing regulatory environment. The CNSC operates in a dynamic environment that is greatly influenced by shifting industry patterns and global economies. As such, the CNSC continues to make adjustments to its plans and priorities to adequately respond to the industry's ongoing evolution.

Extensive risk-management work continued in 2015–16, culminating in the development of an Enterprise Risk Management Policy and Enterprise Risk Profile (ERP). While the Policy sets out, at the highest level, the CNSC's commitment to risk management, the ERP provides a snap shot of the organization's key risks such as the risk of a nuclear accident, malevolent activities, and lost or stolen nuclear substances. The ERP was developed through a series of interviews, workshops and discussions with CNSC staff and managers across the organization. An assessment of the risks was undertaken and additional mitigation put in place where deemed necessary.

Key Risks (as identified in the new 2016 Enterprise Risk Profile)

Risk	Risk Response Strategy	Link to the Organization's Program(s)
There is a risk of a nuclear accident	• Execution of baseline licensing and compliance activities for nuclear power plants (NPPs) • Implementation of Periodic Safety Reviews • Undertake research projects to establish site-wide safety goals	Nuclear Reactor
Malevolent activities	• Continue implementation of REGDOC-2.12.3, *Security of Nuclear Substances: Sealed Sources* • Enhance regulatory control of inventories of disused and historical sources	Nuclear Non-proliferation
Lost or stolen nuclear substances	• Undertake a threat assessment as part of next phase of the national nuclear forensics capability development • Complete CNSC deliverables under the Single Window Initiative • Implement CNSC action plan resulting	Nuclear Substances and Prescribed Equipment

	from the 2015 International Physical Protection Advisory Service (IPPAS) mission recommendations	

The CNSC operates in an environment driven by factors that are not all under its control. Although the CNSC has a comprehensive regulatory oversight regime, unplanned events may occur. Given this possibility, the CNSC maintains strong controls to mitigate risks the organization may face.

Organizational Priorities

In 2015–16, the CNSC focused on five overarching strategic priorities:

1. Provide regulatory oversight of the nuclear industry
2. Modern nuclear regulation
3. Trusted regulator
4. Global nuclear influence
5. Improving management effectiveness.

Additional details on the CNSC's programs, priorities, and achievements in the past year can be found in the *2015–16 Annual Report*[xii], and a number of performance and regulatory oversight reports can be found on the CNSC's website.[xiii]

1. Provide regulatory oversight of the nuclear industry

Provide regulatory oversight for licensing and certification of nuclear facilities and activities, and ensure compliance with the regulatory regime.

Description

The CNSC regulates all nuclear facilities and activities in Canada. It is imperative that all facilities and activities operate safely and make adequate provision to protect the health, safety and security of Canadians and the environment, and that Canada's international commitments on the peaceful use of nuclear energy are respected.

The licensing/certification and compliance of nearly 1,700 licensees are a major part of the CNSC's core work.

The objective of this priority is to ensure licensed operations remain safe and secure.

Priority Type[1]

- Ongoing

[1] Type is defined as follows: previously committed to–committed to in the first or second fiscal year prior to the subject year of the report; ongoing–committed to at least three fiscal years prior to the subject year of the report; and new–newly committed to in the reporting year of the RPP or the DPR. If another type that is specific to the department is introduced, an explanation of its meaning must be provided.

Key Supporting Initiatives

Planned Initiatives	Start Date	End Date	Status[2]	Link to the Organization's Program(s)
• licensing and oversight of existing major nuclear facilities and activities o re-licensing of the Darlington (including its refurbishment) and Bruce nuclear generating stations	Ongoing	Ongoing	The specified licensing activity is complete.	Nuclear Fuel Cycle; Nuclear Reactors; Nuclear Substances and Prescribed Equipment; Nuclear Non-Proliferation
• licensing oversight of safe waste management	Ongoing	Ongoing	Ongoing	
• continuing to deliver commitments on the lessons learned from the Fukushima Daiichi accident	2011	March 2016	Completed	

Progress Toward the Priority
In 2015-16, the CNSC continued to provide regulatory oversight, in Canada, of the use of nuclear energy and materials to protect health, safety, security and the environment. The CNSC also continued to implement Canada's international commitments on the peaceful use of nuclear energy, and continued to disseminate objective scientific, technical and regulatory information to the public. CNSC staff conducted site inspections and desktop reviews, and regulatory oversight reports were presented and discussed in public proceedings throughout the year. In May 2015, the CNSC renewed the Bruce Power operating licence as a single licence for both Bruce A and B. In December 2015, the CNSC renewed the Darlington operating licence, authorizing refurbishment activities and operation of the reactors.

[2] For each planned initiative identified, insert the status as of March 31, 2016, as "completed," "on track" or "delayed".

The CNSC continued its regulatory oversight of nuclear legacy sites: outdated or unused research facilities and buildings, buried and stored radioactive waste, and affected lands. The CNSC also continued to periodically inspect these sites to determine whether these sites and their safety documentation comply with regulatory requirements and environmental requirements.

Additionally, a public hearing was held in 2015 for the renewal of the Class 1B nuclear substance processing facility operating licence for Nordion (Canada) Inc.'s facility and for SRB Technologies (Canada) Inc.'s gaseous tritium light source facility. As well, a public hearing was held in 2015 to remove the Gunnar Remediation Project Phase 2 hold point as it pertained to the remediation of the tailings deposits at the Gunnar Legacy Uranium Mine Site in Northern Saskatchewan.

All Fukushima Action Items (FAIs) for all Canadian nuclear power plant licensees were closed. As part of the established compliance verification program, CNSC staff will continue to monitor FAI implementation at Canadian nuclear power plants through related station-specific Action Items.

2. Modern nuclear regulation

Ensure the CNSC uses science-based, risk-informed and technically sound regulatory practices that take into account scientific uncertainties and evolving expectations.

Description

As a science-based organization, the CNSC bases its decisions on scientific evidence. Like all organizations, the CNSC operates in a rapidly changing environment; it must continuously review changes to determine if they have meaningful implications for the way the CNSC regulates nuclear activities.

Important changes in technology or in basic nuclear science can affect the CNSC's regulatory approach. As well, fundamental changes in the way stakeholders and the public perceive their roles in the regulatory approvals process are taking place. The CNSC needs to ensure that it fully understands these societal changes and how they affect its responsibilities as a modern regulator. To meet the challenges change can introduce, the CNSC must ensure it has the right tools and processes.

For many years, the CNSC has used a "risk-informed" approach to licensing and compliance activities for the nuclear industry's many and varied activities. The CNSC must ensure that there is a common understanding and consistent application of "risk-informed" approaches across all programs.

Priority Type

- Ongoing

Key Supporting Initiatives

Planned Initiatives	Start Date	End Date	Status	Link to the Organization's Program(s)
• strengthen regulatory oversight by considering and adapting to changes in industry, society, science and technology	Ongoing	Ongoing	Ongoing	Nuclear Fuel Cycle; Nuclear Reactors; Nuclear Substances and Prescribed Equipment; Nuclear Non-Proliferation; Scientific, Technical, Regulatory and Public Information
• articulate and implement improved tools and processes	2015–16	2017–18	On track	

for the continued enhanced use of science in regulatory decision-making • develop a common understanding and consistent approach to "risk-informed" for both licensing and compliance	2015–16	2016–17	On track	

Progress Toward the Priority

In 2015-16, CNSC's REGDOC-2.9.1, *Environmental Policy, Assessments and Protection Measures*, was revised based on public feedback. It went out for a 120-day public comment period, ending on March 29, 2016. The document formalizes CNSC's comprehensive environmental protection framework, including its environmental assessment processes under the NSCA, and for projects requiring environmental assessment under the CEAA 2012 legislation. It represents a key tool for the continued use of science, and public and aboriginal consultation in regulatory decision-making.

In support of articulating and implementing improved tools and processes for the continued enhanced use of science in regulatory decision-making, a CNSC working group was established to examine and enhance scientific integrity in a regulatory environment, and is focusing on defined objectives, including developing a science policy. The working group made recommendations to the CNSC's Management Committee in February 2016, all of which were approved. The Management Committee approved the working group to proceed with:

- drafting a science policy in a regulatory environment along with the appointment of a science advisor
- documenting an open door policy
- developing a non-concurrence process, and improvements to the existing Differences of Professional Opinion (DOPO) process
- updating the technical paper publishing process

To date, the open door policy and non-concurrence process have been formally documented and are out for comment by CNSC staff and scientists. The DOPO process map has been updated and is being revised by the working group to improve its effectiveness. The science policy is being drafted and a search for suitable candidates for the science advisor position is underway.

Work related to developing a common understanding and consistent approach to "risk-informed" for both licensing and compliance activity is ongoing and will continue into 2016–17.

3. Trusted regulator

Ensure that the CNSC is recognized by the public and industry as an independent, open and transparent regulator, and credible source of scientific, technical and regulatory information.

Description

Through legislation, the CNSC is mandated to disseminate objective scientific and technical information. In this capacity, the CNSC must engage in meaningful, science-based dialogue to create a climate of trust and openness between stakeholders and the nuclear regulator. It must also work to ensure transparency in the public hearing process to reach audiences beyond those traditionally interested in nuclear safety and science.

The CNSC consults and provides information to Aboriginal groups, the public and communities near existing or potential future nuclear facilities to improve their understanding of how the CNSC regulates the nuclear industry.

Providing objective scientific and technical information is an important part of the CNSC's mandate. As such, it must continually gauge how it is perceived by the public and evaluate the effectiveness of its efforts in disseminating scientific information, making adjustments to its communications strategy as required.

The objective of this priority is to ensure the CNSC is seen as independent, open and transparent, and can facilitate Canadians' understanding of nuclear safety and science through strengthened consultation, communication and outreach efforts.

Priority Type

- Ongoing

Key Supporting Initiatives

Planned Initiatives	Start Date	End Date	Status	Link to the Organization's Program(s)
• strengthen the approach to public participation, which reflects direct community interests in order to solicit value-added input that informs CNSC decision-making	2015–16	2016–17	On track	Nuclear Fuel Cycle; Nuclear Reactors; Nuclear Substances and Prescribed Equipment; Nuclear Non-Proliferation; Scientific,
• take steps to ensure	2015–16	2016–17	On track	Technical,

communities have access to information about regulated facilities and activities				Regulatory and Public Information
• establish a mechanism for ongoing assessment of stakeholder perceptions of the CNSC	2015–16	2016–17	On track	
• make the CNSC an authoritative source for scientific information on nuclear safety	2015–16	2016–17	On track	

Progress Toward the Priority

In 2015–16, CNSC staff completed 179 outreach activities from coast to coast. The activities included waste, environmental and medical-related events, and events that focused on youth, CNSC licensees and host communities. Whether they are classroom presentations, conferences or meetings with licensees, the CNSC's outreach activities aim to demystify nuclear science, describe the CNSC's role as Canada's nuclear regulator and bring a "CNSC face" into communities across the country.

In 2015–16, CNSC staff participated in more than 20 engagement and consultation meetings with Aboriginal groups. These meetings covered a wide range of topics including: regulatory reviews, the operation of existing nuclear facilities, the Independent Environmental Monitoring Program, and the CNSC's early role in the Nuclear Waste Management Organization's Adaptive Phased Management Project for a deep geological repository for used nuclear fuel.

As well, the CNSC demonstrated its commitment to Aboriginal consultation over the past year by engaging with potentially affected Aboriginal groups early in regulatory reviews, ensuring it upheld the honour of the Crown before the Commission made a decision. It also encouraged Aboriginal groups to participate in reviews and public hearings, and continued building long-term relationships with Aboriginal communities interested in CNSC-regulated facilities. During 2015–16, more than 15 Aboriginal groups participated in meetings and workshops with CNSC staff, as well as many public hearings.

In addition to opening its doors to the public during public proceedings and welcoming public interventions, the CNSC engages stakeholders during CNSC 101 sessions. The CNSC 101 program strives to build understanding of and public confidence in Canada's nuclear regulatory regime. The sessions introduce the CNSC to diverse audiences in select locations, providing them with information on how the CNSC regulates and how the public can participate in the licensing process. This past year, 7 CNSC 101 sessions were delivered. The program welcomes requests from Canadians for a session in their community.

Through the ongoing review of feedback and questions received at outreach events, the analysis of media reporting, public enquiries, social media posts, and the analysis of interventions, questions and answers at Commission proceedings, the CNSC continued to take steps to ensure communities have access to information about regulated facilities and activities. Additionally, the CNSC launched a new scientific and technical Web section[xiv] to support the publishing of papers and abstracts. As well, the results of the Independent Environmental Monitoring Program[xv] are publically available online.

A number of the initiatives presented in the table above are ongoing, with estimated completion times scheduled for 2016–17.

4. Global nuclear influence

To ensure the CNSC leverages and influences global nuclear efforts, relevant to Canadian interests and activities, to enhance international nuclear safety, security and non-proliferation.

Description

Safety of the nuclear industry is a global concern. In this context, the CNSC must partner with international regulators, governments, industry and the public to advance regulatory issues related to nuclear safety, security and non-proliferation of particular interest to Canada. The CNSC works with these partners to ensure clarity of roles and responsibilities across jurisdictions.

The objective of this priority is to leverage the CNSC's expertise as a world-class regulator to influence global nuclear regulatory efforts in support of Canadian interests.

Priority Type

- New

Key Supporting Initiatives

Planned Initiatives	Start Date	End Date	Status	Link to the Organization's Program(s)
• develop clear objectives and a targeted agenda, for the long term strategic benefits to Canada and the	2015–16	2016–17	On track	Nuclear Fuel Cycle; Nuclear Reactors; Nuclear Substances and Prescribed

CNSC, related to nuclear regulatory issues of safety and security • develop an improved framework for enhanced global nuclear safety and security through Canada's and the CNSC's support of international peer reviews	2015–16	2016–17	On track	Equipment; Nuclear Non-Proliferation

Progress Toward the Priority

Two international peer reviews took place in Canada in 2015–16. The Operational Safety Review Team (OSART) Mission (an in-depth review of operational safety performance at a nuclear power plant)[xvi] of Canadian nuclear power plants began with the Bruce Power facility in December 2015. In its report, the OSART outlined areas of strong performance, such as the development of an effective overall technical strategy to manage reactor safety and the use of a wide range of engaging training settings to provide employees with learning and development opportunities. Planning activities continue to be on-track for the OSART mission to Ontario Power Generation facilities and sites in 2016.

The second peer review, the International Physical Protection Advisory Services (IPPAS) Mission, was conducted in October 2015 and reviewed the nuclear security regime of Canadian nuclear facilities and other radioactive material and associated facilities and activities. In March 2016, the CNSC received the final IAEA report, and it concluded that Canada conducts mature, effective, strong, and sustainable nuclear security activities, and operates a well-established nuclear security regime. A management action plan was developed and approved in March 2016 to address issues raised in the report.

Additional information about the results of these peer reviews, which confirm the safety and security of Canada's nuclear facilities, can be found on the CNSC's website[xvii].

In October 2015, Ramzi Jammal, CNSC Executive Vice-President and Chief Regulatory Operations Officer, was elected President of the 7th Review Meeting of the Convention on Nuclear Safety. In this role, Mr. Jammal will lead discussions among participating countries on how to improve nuclear safety worldwide.

Also in 2015–16, the CNSC developed an international strategy to help guide its efforts in leveraging and influencing global nuclear safety and security efforts that are relevant to Canadian interests and activities. The CNSC has established objectives and priorities under this strategy. An action plan to implement the strategy is under development.

5. Improving management effectiveness

To ensure that the CNSC is a dynamic, flexible and highly-skilled organization, supported by modern management practices and tools and responds to an evolving workforce and industry.

Description

Parliament and Canadians expect the federal government to be well-managed and to exercise sound and efficient stewardship of public funds and resources. Accordingly, the Government of Canada is challenging departments and agencies to make their programs, processes, and tools more efficient to improve the overall effectiveness of government operations. In addition, given the changes seen in the nuclear industry – both in the closing of major nuclear facilities as well as delays in starting new major projects – the CNSC must adjust to and manage impacts to its operational plans and priorities, which in turn affect its cost-recovery regime.

The CNSC must maintain a high level of effectiveness while balancing the realities of a changing work environment. It must create a flexible, effective workplace, without compromise to safety, and maintain a high level of employee engagement. The CNSC's plans will focus on adopting modern technology, tools and practices to ensure it remains nimble and adaptable in the face of regulatory oversight challenges and opportunities in the Canadian nuclear industry.

The objective of this priority is to increase the CNSC's ability to effectively respond to industry regulatory requirements, and to continue improving its management of human, capital and technological resources and activities.

Priority Type

- New

Key Supporting Initiatives

Planned Initiatives	Start Date	End Date	Status	Link to the Organization's Program(s)
• consolidate strategic planning to incorporate enterprise risk profiles, e-scans, etc. and further integrate corporate and operational planning	2015–16	2016–17	On track	Nuclear Fuel Cycle; Nuclear Reactors; Nuclear Substances and Prescribed Equipment; Nuclear Non-Proliferation; Scientific, Technical, Regulatory and
• implement more rigorous strategic workforce planning supported by	2015–16	2016–17	On track	

analysis of the CNSC's needs				Public Information; Internal Services Program
• leverage technology through the development of a mobile computing strategy and increase the use of the CNSC's e-portal	2015–16	2016–17	On track	
• provide leadership on relevant Government of Canada regulatory reform commitments	2015–16	2016–17	On track	
• undertake a review of CNSC financial systems to support the Government of Canada's strategy for the Financial Management Transformation Initiative	2015–16	2017-18	On track	

Progress Toward the Priority

In 2015-16, the CNSC continued to strengthen its strategic planning. This included finalizing its Enterprise Risk Management Policy and Enterprise Risk Profile and implementing a strengthened In-Year Integrated Performance Reporting process.

The CNSC also continued to strengthen its strategic workforce planning capabilities, reviewed its organizational design to ensure it supports competency development and career progression, and reviewed and strengthened talent management to ensure development of required core competencies and enhance career development. New talent is being recruited and a pool of new graduates will be maintained to build capabilities and meet the CNSC's future needs. Additional information, including progress on key behaviours and career maps, can be found in the discussion of Internal Services in Section III.

The CNSC also continued to implement its financial guarantee program, and continued to enhance its mobile computing strategy. Additional details can be found in Section III, Internal Services.

For more information on organizational priorities, see the Minister's mandate letter.[xviii]

Section II: Expenditure Overview

Actual Expenditures

Budgetary Financial Resources (dollars)

2015–16 Main Estimates	2015–16 Planned Spending	2015–16 Total Authorities Available for Use	2015–16 Actual Spending (authorities used)	Difference (actual minus planned)
133,179,745	141,533,432	145,040,408	137,968,668	(3,564,764)

Total budgetary expenditures as shown in the 2015–16 Main Estimates exclude contributions to employee benefit plans related to personnel expenditures incurred pursuant to subsection 21(3) of the NSCA. The 2015–16 actual expenditures of $138.0 million is comprised of $39.8 million in voted expenditures, $13.4 million in contributions to employee benefit plans and $84.8 million for expenditures pursuant to subsection 21(3) of the NSCA.

The financial resource table above provides a summary of total planned spending, total authorities and actual spending for the CNSC in fiscal year 2015–16. The increase from Main Estimates to planned spending is mainly explained by contributions to employee benefit plans related to personnel expenditures pursuant to subsection 21(3) of the NSCA. The increase from planned spending to total authorities available for use is primarily due to in-year adjustments for the operating budget carry forward from 2014–15 to 2015–16 as well as reimbursement of eligible paylist shortfall expenditures from the Treasury Board Secretariat (TBS) and compensation allocations for collective agreement.

Human Resources (Full-Time Equivalents [FTEs])

2015–16 Planned	2015–16 Actual	2015–16 Difference (actual minus planned)
791	808	17

Actual FTE use of 808 exceeded the planned FTE use of 791 due to the implementation of the workforce renewal initiative, which is part of the CNSC's comprehensive strategy to ensure workforce sustainability by addressing the potential impact of attrition and ensuring effective knowledge transfer.

Budgetary Performance Summary

Budgetary Performance Summary for Program(s) and Internal Services (dollars)

Program(s) and Internal Services	2015–16 Main Estimates	2015–16 Planned Spending	2016–17 Planned Spending	2017–18 Planned Spending	2015–16 Total Authorities Available for Use	2015–16 Actual Spending (authorities used)	2014–15 Actual Spending (authorities used)	2013–14 Actual Spending (authorities used)
Regulatory framework program							28,509,322	27,536,138
Licensing and certification program							21,355,025	24,072,978
Compliance program							45,872,668	48,652,198
Nuclear fuel cycle program	11,523,104	12,245,890	12,791,173	13,026,747	12,336,289	10,173,578		
Nuclear reactors program	38,370,191	40,776,958	42,592,667	43,377,094	41,077,974	40,002,299		
Nuclear substances and prescribed equipment program	11,891,601	12,637,501	13,200,221	13,443,329	15,256,850	13,930,082		
Nuclear non-proliferation program	6,299,582	6,694,722	6,992,824	7,121,610	6,847,634	5,982,791		
Scientific, technical, regulatory and public information program	26,283,818	27,932,468	29,176,241	29,713,577	28,013,757	26,696,945		
Subtotal	94,368,296	100,287,539	104,753,126	106,682,357	103,532,504	96,785,695	95,737,015	100,261,314
Internal services subtotal	38,811,449	41,245,893	43,082,484	43,875,931	41,507,904	41,182,973	42,402,554	45,355,707
Total	133,179,745	141,533,432	147,835,610	150,558,288	145,040,408	137,968,668	138,139,569	145,617,021

The resource levels indicated in the performance summary table above include the amounts reported for the CNSC's Main Estimates as well as the authorities used for the previous three years, as presented in the *Public Accounts of Canada*. Resource levels for planned spending

include the most recent plans, as presented in the 2015–16 and 2016–17 Reports on Plans and Priorities (RPPs).

Following a year-long review of the organization, the CNSC adopted a new Program Alignment Architecture (PAA), which was implemented in 2015–16. The new architecture more clearly reflects the fundamental aspects of regulatory oversight of programs as part of the CNSC's regulatory work.

The new PAA includes the following programs:

- Nuclear fuel cycle program
- Nuclear reactors program
- Nuclear substances and prescribed equipment program
- Nuclear non-proliferation program
- Scientific, technical, regulatory and public information program
- Internal services program

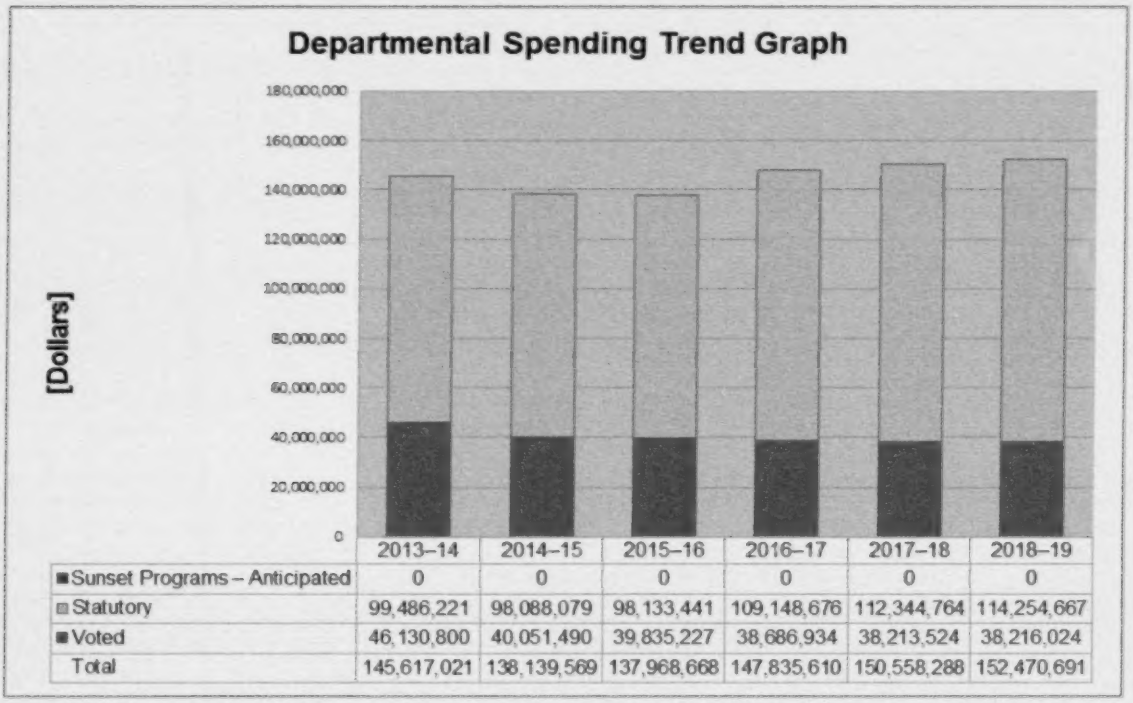
The CNSC's Main Estimates for fiscal year 2015–16 totaled $133.2 million, compared to total authorities of $145.1 million. The $11.9 million difference is mainly explained by:

- Contributions to employee benefit plans for personnel expenditures related to subsection 21(3) of the NSCA that were not included in the 2015–16 Main Estimates
- Operating budget carry forward from 2014–15 to 2015–16
- Funds received from TBS for the reimbursement of eligible paylist shortfall expenditures and compensation allocations for collective agreement

The change in planned spending from 2015–16 to 2017–18 is mainly due to forecasted salary retroactive payments and economic increases for salary costs.

The CNSC's actual spending decreased from $145.6 million in 2013–14 to $138.1 million 2014–15 primarily due to spending in 2013–14 related to severance cash-out. Spending remained stable from $138.1 million in 2014–15 to $138.0 million in 2015–16 as the launch of the workforce renewal initiative replaced higher salaried FTEs with an increased number of lower salaried FTEs.

Departmental Spending Trend



	2013–14	2014–15	2015–16	2016–17	2017–18	2018–19
Sunset Programs – Anticipated	0	0	0	0	0	0
Statutory	99,486,221	98,088,079	98,133,441	109,148,676	112,344,764	114,254,667
Voted	46,130,800	40,051,490	39,835,227	38,686,934	38,213,524	38,216,024
Total	145,617,021	138,139,569	137,968,668	147,835,610	150,558,288	152,470,691

Statutory Authority

The CNSC's statutory spending authority is comprised of payments to employee benefit plans and expenditures pursuant to subsection 21(3) of the NSCA, which allows the CNSC to respend fees collected in the conduct of a portion of its regulatory oversight activities. Fees collected by the CNSC represent approximately 70% of planned spending.

The decrease in statutory spending authority from $99.5 million in 2013–14 to $98.1 million in 2014–15 resulted from a reduction in regulatory oversight activities related to Hydro-Québec's shutdown of the Gentilly-2 Nuclear Generating Station in December 2012. Planned spending is forecasted to increase from $98.1 million in 2015–16 to $109.1 million in 2016–17 primarily due to projected increases in salaries, including retroactive salary payments, and to the implementation of the workforce renewal initiative. The increase in planned spending from 2016–17 to 2018–19 is mainly due to projected increases in the cost of living, including salaries and wages.

Voted Authority

The decrease in voted authorities from 2013–14 to 2014–15 is attributable to a one-time payout of federal government employee benefits related to accumulated severance in 2013–14. The decrease in voted authorities from 2015–16 to 2016–17 is primarily the result of a decrease in the operating budget carry forward to 2016–17 and a decrease in funding for the government-wide Single Window Initiative to streamline government import regulations and border processes for commercial trade, announced in Budget 2013. The decrease in voted authorities from 2016–17 to 2017–18 is mainly due to the completion of funding for the Single Window Initiative. The voted authorities remain stable from 2017–18 to 2018–19.

Sunset Programs

The CNSC does not have any sunset programs funding at this time.

Expenditures by Vote

For information on the CNSC's organizational voted and statutory expenditures, consult the *Public Accounts of Canada 2016*.[xix]

Alignment of Spending With the Whole-of-Government Framework

Alignment of 2015–16 Actual Spending With the Whole-of-Government Framework[xx] (dollars)

Program	Spending Area	Government of Canada Outcome	2015–16 Actual Spending
1.1 Nuclear Fuel Cycle	Social affairs	A safe and secure Canada	10,173,578
1.2 Nuclear Reactors	Social affairs	A safe and secure Canada	40,002,299
1.3 Nuclear Substances and Prescribed Equipment	Social affairs	A safe and secure Canada	13,930,082
1.4 Nuclear Non-Proliferation	Social affairs	A safe and secure Canada	5,982,791
1.5 Scientific, Technical, Regulatory and Public Information	Social affairs	A safe and secure Canada	26,696,945

Total Spending by Spending Area (dollars)

Spending Area	Total Planned Spending	Total Actual Spending
Economic affairs		
Social affairs	100,287,539	96,785,695
International affairs		
Government affairs		

Financial Statements and Financial Statements Highlights

Financial Statements

Financial Statements Highlights

In accordance with TBS policy, the CNSC reports on a full accrual accounting basis, based on generally accepted accounting principles. The tables below provide highlights from the CNSC's statement of financial position and statement of operations, as presented in its audited financial statements. As such, there are differences between these tables and those presented in other sections of the *2015–16 Departmental Performance Report*, which are prepared on the modified cash basis of accounting.

Condensed Statement of Operations (unaudited)
For the Year Ended March 31, 2016 (dollars)

Financial Information	2015–16 Planned Results	2015–16 Actual	2014–15 Actual	Difference (2015–16 actual minus 2015–16 planned)	Difference (2015–16 actual minus 2014–15 actual)
Total expenses	157,495,000	155,045,686	153,868,757	(2,449,314)	1,176,929
Total revenues	106,783,000	106,548,343	104,830,693	(234,657)	1,717,650
Net cost of operations before government funding and transfers	50,712,000	48,497,343	49,038,064	(2,214,657)	(540,721)

The planned results for fiscal year 2015–16 are as set out in the future oriented statements published within the *2015–16 Report on Plans and Priorities*.

The CNSC total expenses increased by 0.8% or $1.2 million from 2014–15 to 2015–16 while revenues increased by 1.6% or $1.7 million from 2014–15 to 2015–16. The increase in total expenses was mainly due to an increase in salary and employee benefits expenses attributed to cost-of-living adjustments and the implementation of the workforce renewal initiative, offset by a decrease in the provision for severance benefits. The increase in revenues is attributable to an increase in expenses incurred to undertake regulatory activity plans as well as a review of charging formulas used for Formula fees, in order to better align them with regulatory operating activities.

The format and content of the Condensed Statement of Financial Position follows:

Condensed Statement of Financial Position (unaudited)
As at March 31, 2016 (dollars)

Financial Information	2015–16	2014–15	Difference (2015–16 minus 2014–15)
Total net liabilities	44,223,206	41,532,530	2,690,676
Total net financial assets	29,743,329	27,095,110	2,648,219
Departmental net debt	14,479,877	14,437,420	42,457
Total non-financial assets	11,482,926	10,055,338	1,427,588
Departmental net financial position	(2,996,951)	(4,382,082)	1,385,131

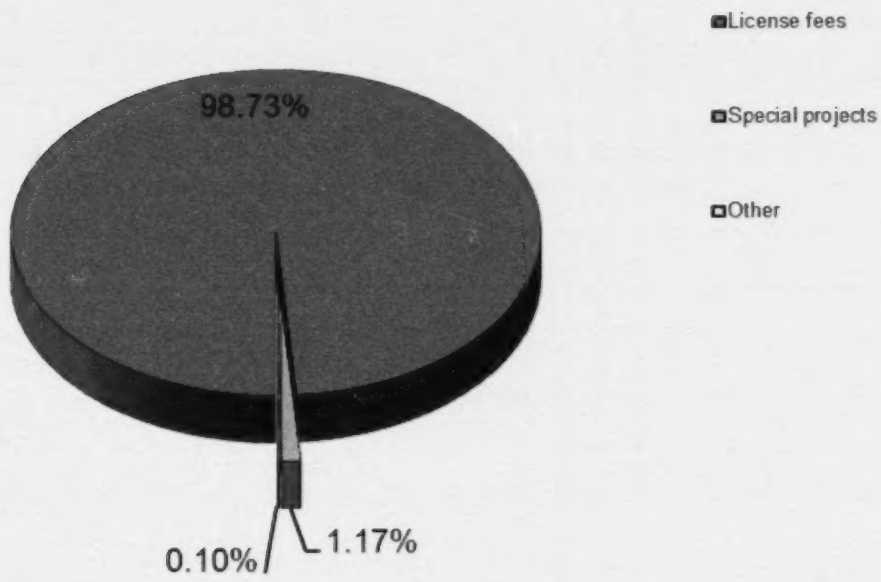
The increase in the CNSC's net liabilities is due mainly to the accrual of a liability for pending increases to salary costs.

The increase in the CNSC's net financial assets is primarily a result of an increase in accrued salaries and wages due from the Consolidated Revenue Fund (CRF). Amounts due from the CRF are the result of timing differences at year-end between when a transaction affects authorities and when it is processed through the CRF. Amounts due from the CRF represent the net amount of cash that the CNSC is entitled to draw from the CRF without further authorities to discharge its liabilities.

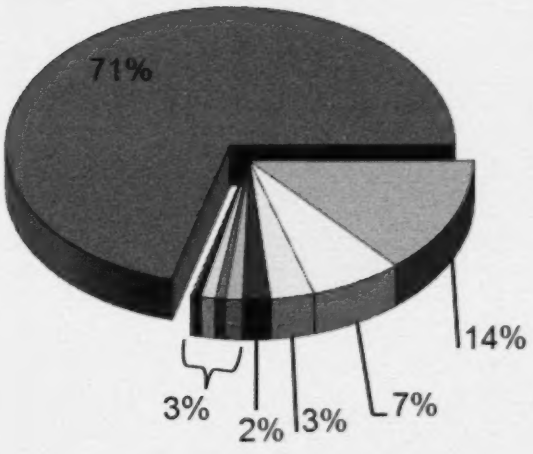
The increase in the CNSC's non-financial assets is due to a net increase in the value of tangible capital assets, resulting from in-year purchased capital assets exceeding the value of annual amortization.

The graphs below show the CNSC's cost of operations and revenues by expenses and revenue category.

Total Fee Revenue



Total Cost of Operations



Section III: Analysis of Program(s) and Internal Services

Programs

Program 1.1: Nuclear Fuel Cycle

Description

This program aims to regulate facilities associated with the nuclear fuel cycle (nuclear processing facilities, nuclear waste management facilities, and uranium mines and mills) to protect the health, safety and security of Canadians and the environment in a manner consistent with Canada's international obligations on the peaceful uses of nuclear energy.

The program regulates all the lifecycle stages for these facilities – from site preparation through construction and operation, to decommissioning (or long-term management, in the case of some nuclear waste facilities). The licensing and compliance activities associated with this program are all managed through a risk-informed and performance-based approach. Compliance verification is conducted against established criteria consistent with the licensing basis of the facility. The results of regulatory activities associated with this program are communicated to the public on a regular basis. The program is guided by a management system, and is based on fundamental safety principles for continuous improvement.

Program Performance Analysis and Lessons Learned

- Held a public hearing in 2015 for the renewal of the Class 1B nuclear substance processing facility operating licence for Nordion (Canada) Inc.'s facility and for SRB Technologies (Canada) Inc.'s gaseous tritium light source facility
- Held a public hearing in 2015 to remove the Gunnar Remediation Project Phase 2 hold point as it pertained to the remediation of the tailings deposits at the Gunnar Legacy Uranium Mine Site in Northern Saskatchewan
- Developed discussion paper DIS-16-03, *Radioactive Waste Management and Decommissioning*, in advance of a stakeholder feedback period beginning in early 2016–17[xxi]

Safe uranium mines and mills:

- Personal dose records for operating mines and mills from 2010 to 2015 show that radiation doses to workers were at safe levels and well below regulatory limits.
- In 2015–16, effluent discharges to the environment from uranium mining were all below regulatory limits.
- The public, as well as the locally produced food supply in the Athabasca Basin in Saskatchewan, continue to be protected.

Safe nuclear processing and research facilities:

- In 2015–16, there were no events with consequences or impact to public health or the environment.
- Radiation doses to the public and to workers continued to be well below regulatory limits.

Safe nuclear waste management:

- Doses to the public did not exceed the regulatory limit of one millisievert (mSv) per year.
- Doses to workers at nuclear waste management facilities did not exceed the regulatory limit of 50 mSv per year.
- There were no releases from nuclear waste management facilities that exceeded regulatory limits.

Budgetary Financial Resources (dollars)

2015–16 Main Estimates	2015–16 Planned Spending	2015–16 Total Authorities Available for Use	2015–16 Actual Spending (authorities used)	2015–16 Difference (actual minus planned)
11,523,104	12,245,890	12,336,289	10,173,578	(2,072,312)

The difference between planned versus actual spending is mainly due to a reallocation of resources from the Uranium Mines and Mills sub-program and the Nuclear Waste Management Facilities sub-program to the Nuclear Processing Facilities sub-program. This reallocation results from changing regulatory oversight demands in this sector.

Human Resources (FTEs)

2015–16 Planned	2015–16 Actual	2015–16 Difference (actual minus planned)
74	64	(10)

Performance Results

Expected Results	Performance Indicators	Targets	Actual Results
Nuclear processing facilities, nuclear waste management facilities, and uranium mines and mills are regulated to protect the health, safety and security of Canadians and the environment.	Number of radiation exposures over the allowable dose limits for nuclear energy workers and members of the public	0	0
	Number of radiological releases to the environment above regulatory limits	0	0

Program 1.2: Nuclear Reactors Program

Description

This program aims to regulate facilities associated with nuclear energy (nuclear power plants and research reactors), to protect the health, safety and security of Canadians and the environment in a manner consistent with Canada's international obligations on the peaceful uses of nuclear energy.

The program regulates all the lifecycle stages for nuclear reactors (specifically, nuclear power plants and research reactors), from site preparation, construction, and operation, to the decommissioning of the facility and abandoning the site (once operations are ended). The licensing and compliance activities associated with this program are all managed through a risk-informed and performance-based approach. Compliance verification is conducted against established criteria consistent with the licensing basis of the facility. The results of all the regulatory activities associated with this program are communicated to the public on a regular basis. The program is guided by a management system and is based on fundamental safety principles for continuous improvement.

Program Performance Analysis and Lessons Learned

Safe nuclear power generation:

- For 2015, all Canadian nuclear power plants obtained either "satisfactory" or "fully satisfactory" ratings in the CNSC's 14 safety and control areas.[xxii]
- In May 2015, the Commission renewed the operating licences issued to Bruce Power as a single licence for both Bruce A and B, valid from June 1, 2015 until May 31, 2020.
- In December 2015, the Commission renewed the Darlington nuclear power plant operating licence issued to Ontario Power Generation (OPG). With this licence renewal, the Commission authorized OPG to operate the Darlington Nuclear Generating Station from January 1, 2016 until November 30, 2025, and to undertake the refurbishment and life extension of the station's four reactor units.
- The Power Reactor Operation Licence for the Pickering nuclear generating station will expire in August 2018. OPG has notified the CNSC of its intent to apply for the renewal of the operating licence and is conducting a Periodic Safety Review (PSR) in accordance with CNSC REGDOC-2.3.3, *Periodic Safety Reviews*, to support its licence renewal application. A PSR is a systematic and comprehensive evaluation of the design, condition and operational elements of the plant that are considered important to nuclear safety. The objective is to identify practical nuclear safety enhancements of the facility to a level approaching that of modern requirements and

practices. The Commission will consider the results of the PSR during the licence renewal hearings to take place in 2018.

- In November 2015, NB Power held a large-scale nuclear exercise called Exercise Intrepid. The purpose of this two-day exercise was to validate the preparedness of Point Lepreau, NB Power, various levels of governments, and non-government organizations and agencies to respond to a large-scale nuclear event. The exercise gave all players opportunities to test emergency response plans and measures, and identify areas for improvement. CNSC staff concluded that NB Power and other agencies continue to successfully demonstrate readiness to respond to a nuclear emergency.
- In March 2015, Hydro-Québec submitted a revised decommissioning plan and decommissioning cost study to reflect the decision to permanently shut down the Gentilly-2 reactor rather than refurbishing it. The CNSC expects to complete its review and assessment of the revised decommissioning plan and financial guarantee in 2016. The revised decommissioning plan will then be presented to the Commission at a public hearing.
- In May 2015, the CNSC made the decision to approve the request from Canadian Nuclear Laboratories to decommission the fuel rod storage and handling bays facility in Building 204 A/B and the plutonium recovery laboratory in Building 220 at Chalk River Laboratories.

Budgetary Financial Resources (dollars)

2015–16 Main Estimates	2015–16 Planned Spending	2015–16 Total Authorities Available for Use	2015–16 Actual Spending (authorities used)	2015–16 Difference (actual minus planned)
38,370,191	40,776,958	41,077,974	40,002,299	(774,659)

Human Resources (FTEs)

2015–16 Planned	2015–16 Actual	2015–16 Difference (actual minus planned)
248	257	9

Performance Results

Expected Results	Performance Indicators	Targets	Actual Results
Nuclear power reactors and research reactors are regulated to protect the health, safety and security of Canadians and the environment	Number of radiation exposures over the allowable dose limits for nuclear energy workers and members of the public	0	0
	Number of radiological releases to the environment above regulatory limits	0	0

Program 1.3: Nuclear Substances and Prescribed Equipment

Description

This program aims to provide assurance to the Canadian public that nuclear substances and prescribed equipment are regulated to protect the health, safety and security of Canadians and the environment, in a manner consistent with Canada's international obligations on the peaceful uses of nuclear energy.

The CNSC issues certificates for the design of radiation devices and prescribed equipment to ensure their safe use and issues licences for the safe handling and use of nuclear substances, radiation devices and prescribed equipment. In addition, the CNSC certifies radiography device operators who must be certified to use exposure devices, as well as certain radiation safety officers. The CNSC monitors the regulated activities to ensure the safety of workers and the general public, and to protect the environment. The licences issued are categorized into various use types, depending on the type of licensed activity, nuclear substances and prescribed equipment being used, as well as the risk posed by these use types. The regulated activities for which these licences are issued are related to four distinct stakeholder groups: medical, industrial, commercial, and academic and research. Each of these groups uses nuclear substances and prescribed equipment in its work. The CNSC conducts compliance activities to ensure licensees are in compliance with regulatory requirements.

The licensing and compliance activities associated with this program are all managed through a risk-informed and performance-based approach. Compliance verification is conducted against established criteria consistent with the licensing basis of the activity being regulated. The results of regulatory activities associated with this program are communicated to the public and other stakeholders on a regular basis. The program is guided by a management system, and is based on fundamental safety principles for continuous improvement.

Program Performance Analysis and Lessons Learned

Safe use of nuclear substances and equipment in medicine:

- The CNSC performed 221 inspections in the medical sector during 2015–16.
- In 2015–16, all medical-sector nuclear energy workers (NEWs) received radiation doses below the regulatory limit of 50 millisieverts (mSv) per year. Of these NEWs, 79.4 percent received less than the dose limit for members of the public of one mSv per year.
- All workers not designated as NEWs received less than the public regulatory dose limit of one mSv per yr.
- The CNSC did not issue any administrative monetary penalties to medical-sector licensees in 2015–16.

Safe nuclear substances and transportation:

- In 2015–16, the CNSC performed 997 inspections in the academic, commercial and industrial sectors.
- In general, licensees across all sectors continued to show satisfactory compliance ratings for operating performance and radiation protection. Average compliance levels continue to trend towards higher satisfactory ratings.
- Four administrative monetary penalties were issued to the industrial and academic sectors in 2015–16.
- Additional performance information, including regulatory oversight reports on the use of nuclear substances, can be found on the CNSC's website.[xxiii]

Budgetary Financial Resources (dollars)

2015–16 Main Estimates	2015–16 Planned Spending	2015–16 Total Authorities Available for Use	2015–16 Actual Spending (authorities used)	2015–16 Difference (actual minus planned)
11,891,601	12,637,501	15,256,850	13,930,082	1,292,581

The difference between planned versus actual spending is mainly due to a reallocation of resources from the Academic and Research Sector and Dosimetry Services sub-programs to the Medical Sector, Industrial Sector, Commercial Sector, and Packaging and Transport sub-programs. This reallocation results from changing regulatory oversight demands in these areas.

Human Resources (FTEs)

2015–16 Planned	2015–16 Actual	2015–16 Difference (actual minus planned)
77	83	6

Performance Results

Expected Results	Performance Indicators	Targets	Actual Results
Nuclear substances and prescribed equipment are regulated to protect the health, safety and security of Canadians and the environment	Number of radiation exposures over the allowable dose limits for nuclear energy workers and members of the public	0	0
	Number of radiological releases to the environment above regulatory limits	0	0

Program 1.4: Nuclear Non-Proliferation

Description

This program aims to provide assurance to both the Canadian public and the international community that the development, production and use of nuclear energy and nuclear substances, prescribed equipment and prescribed information is safe and conforms with every control measure and international obligations to which Canada has agreed, including those under the *Treaty on the Non-Proliferation of Nuclear Weapons*. Under its mandate, the CNSC implements measures of control respecting nuclear non-proliferation, including domestic and international arrangements, International Atomic Energy Agency (IAEA) safeguards, and import-export of nuclear substances, prescribed equipment and prescribed information.

Program Performance Analysis and Lessons Learned

Import and export licensing, safeguards, and non-proliferation:

- During 2015–16, the CNSC conducted risk-informed licensing assessments and made licensing decisions on applications for the export and import of nuclear substances, prescribed equipment and prescribed information, in accordance with the *Nuclear Non-proliferation Import and Export Control Regulations* and the *General Nuclear Safety and Control Regulations*. It issued a total of 805 export licences and 162 import licences.
- The CNSC conducted safeguards inspections and facilitated IAEA safeguards activities in Canada in support of the IAEA's annual conclusion that all nuclear material in Canada remained in peaceful use in 2015-16. The CNSC also performed nuclear material accountancy and reporting functions to track and report on inventories and transfers of all nuclear material subject to the *Safeguards Agreement*.
- The Canadian Safeguards Support Program (CSSP) continued to advance and improve the application of safeguards in Canada and abroad. Projects under the CSSP in 2015–16 contributed to these objectives through the development of new safeguards equipment, the promotion of safeguards compliance, safeguards capacity building and training, and the evaluation and maintenance of safeguards equipment in Canada.
- The CNSC is committed to supporting the Government of Canada on export control measures and safeguards issues in multilateral fora, consistent with Canada's nuclear non-proliferation policy and international commitments. In 2015–16, the CNSC contributed its expertise on nuclear non-proliferation matters in several international meetings and initiatives including: the 2015 Review Conference of the Parties to the *Treaty on the Non-Proliferation of Nuclear Weapons*; the IAEA Board of Governors and General Conference; working groups of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO Preparatory Commission); the International Partnership for Nuclear Disarmament Verification; and the Nuclear Suppliers Group.

Budgetary Financial Resources (dollars)

2015–16 Main Estimates	2015–16 Planned Spending	2015–16 Total Authorities Available for Use	2015–16 Actual Spending (authorities used)	2015–16 Difference (actual minus planned)
6,299,582	6,694,722	6,847,634	5,982,791	(711,931)

The difference between planned and actual spending in this program is primarily due to a redeployment of resources from the Safeguards sub-program to the Import-Export sub-program due to a change in regulatory oversight demands in these areas.

Human Resources (FTEs)

2015–16 Planned	2015–16 Actual	2015–16 Difference (actual minus planned)
34	38	4

Performance Results

Expected Results	Performance Indicators	Targets	Actual Results
Assurance to the Canadian public and international community that nuclear energy and nuclear substances, prescribed equipment and prescribed information are used for peaceful purposes, and do not contribute to threats to nuclear non-proliferation and radiological safety or security	Maintain IAEA safeguards broader conclusion for Canada (the IAEA concludes that there was no diversion of declared nuclear material, and no indication of undeclared nuclear material or nuclear activity)	100%[3]	100%*

*Additionally, all international transfers of Canadian nuclear goods and technology are authorized and remain in peaceful use (100%).

[3] 100% refers to IAEA broader conclusion has been maintained for that year.

Program 1.5: Scientific, Technical, Regulatory and Public Information

Description

This program aims to inform the Canadian public – including Canadian nuclear licensees, vendors, academic community, special interest groups, Aboriginal groups, other government departments, other jurisdictions and international organizations – that nuclear facilities and activities are being used safely, in adherence to regulatory requirements and best available scientific and technical information. This program is realized through the processes of generating scientific and technical information, institutionalizing the information within the regulatory framework, and disseminating the information through a variety of channels and engagement practices.

Program Performance Analysis and Lessons Learned

- To safely regulate an evolving nuclear sector, the CNSC maintains an effective and flexible regulatory framework that consists of laws passed by Parliament that govern the regulation of Canada's nuclear industry, and regulations, licences and documents that the CNSC uses to regulate the industry. In 2015–16, the CNSC's regulatory policy team published or completed 12 regulatory framework projects.
- The CNSC developed a 10–year, forward-looking timeline for the nuclear sector, including licence renewal for large licensees, evolving technology, market trends, global policy trends and evolving societal expectations, and presented it at the Regulatory Affairs Workshop of the Canadian Nuclear Association Annual Conference in February 2016. Stakeholder perspectives were gathered in a tabletop conversation workshop. This information will be used to inform the CNSC's evergreen Regulatory Framework Plan.
- The CNSC launched a new scientific and technical Web section to provide access to the CNSC's published papers and abstracts. Advisors continue to work with subject-matter-experts to post abstracts to the Web in plain language.
- A number of website enhancements were made to showcase scientific, technical, regulatory and public information, including developing infographics, interactive maps of licenced facilities, reorganizing online Commission documentation for search by facility, and crosslinking of nuclear facilities Web pages with relevant Commission documentation.
- Information dissemination during the year was augmented by dozens of website content enhancements, a very active CNSC social media presence, broad public notice deployment, open public Commission hearings, meetings and webcasts, community outreach events and issuance of emails to subscribers.
- In March 2016, the CNSC delivered a presentation at the Multinational Workshop on the Regulation of Deep Geological Repositories, which provided an overview of the CNSC and the status of radioactive waste management in Canada.

Budgetary Financial Resources (dollars)

2015–16 Main Estimates	2015–16 Planned Spending	2015–16 Total Authorities Available for Use	2015–16 Actual Spending (authorities used)	2015–16 Difference (actual minus planned)
26,283,818	27,932,468	28,013,757	26,696,945	(1,235,523)

Within the Scientific, Technical and Regulatory and Public Information program, resources were reallocated from the Regulatory Framework and Public Engagement and Outreach sub-programs to the Scientific and Technical Information and Research sub-programs in response to changes in regulatory oversight needs.

Human Resources (FTEs)

2015–16 Planned	2015–16 Actual	2015–16 Difference (actual minus planned)
144	145	1

Performance Results

Expected Results	Performance Indicators	Targets	Actual Results
Scientific, technical and regulatory information is delivered to inform the Canadian public on the effectiveness of Canada's nuclear regulatory regime	Number of views of CNSC Web pages related to this program*	Baseline being developed	5,247,516
	Number of public requests for information (non-ATIP) or outreach support	Baseline being developed	1521

*Includes all views of CNSC external communications channels such as website, social media channels, emails to subscribers and public notices.

Internal Services

Description

Internal services are groups of related activities and resources that are administered to support the needs of programs and other corporate obligations of an organization. Internal services include only those activities and resources that apply across an organization, and not those provided to a specific program. The groups of activities are Management and Oversight Services; Communications Services; Legal Services; Human Resources Management Services; Financial Management Services; Information Management Services; Information Technology Services; Real Property Services; Materiel Services; and Acquisition Services.

Program Performance Analysis and Lessons Learned

Key achievements in this area for 2015–16 included:

- Revised the CNSC workforce profile and clarifying roles and responsibilities
- Developed a set of key behaviours that supports all work types within the CNSC
- Developed a career map for inspectors, including researching best practices on career mapping, benchmarking with similar initiatives in other organizations, conducting focus groups and interviewing inspectors and managers to identify the experiences that are most critical to the success of an inspector
- Continued to look for opportunities to leverage cloud technologies and to develop and enhance its mobile computing strategy
- Continued to support management decision-making with financial analysis, including support regarding Financial Guarantees
- Continued implementation of the Harmonized Plan for Improvement Initiatives to support ongoing improvement
- Undertook preparatory work for the launch of Internal Safety Culture workshops to further reinforce safety as an overriding priority
- Continued work to establish the *Nuclear Liability and Compensation Act (NLCA)*, which received Royal Assent in February 2015. The NLCA is expected to come into force in January 2017, at which time the *Nuclear Liability Act* will be repealed. Under the new regime, the CNSC only makes recommendations and no longer designates sites. The CNSC has provided its recommendations to Natural Resources Canada for the preparation of the regulations to designate sites

Budgetary Financial Resources (dollars)

2015–16 Main Estimates	2015–16 Planned Spending	2015–16 Total Authorities Available for Use	2015–16 Actual Spending (authorities used)	2015–16 Difference (actual minus planned)
38,811,449	41,245,893	41,507,904	41,182,973	(62,920)

Human Resources (FTEs)

2015–16 Planned	2015–16 Actual	2015–16 Difference (actual minus planned)
214	221	7

Section IV: Supplementary Information

Supporting Information on Lower-Level Programs

Supporting information on lower-level programs is available on the CNSC's website.

Supplementary Information Tables

The following supplementary information tables[xxiv] are available on the CNSC's website.

- Departmental Sustainable Development Strategy
- Internal Audits and Evaluations
- Response to Parliamentary Committees and External Audits
- User Fees, Regulatory Charges and External Fees

CNSC – External Performance Standards

Activity	Performance Standard	Target	Results 2013–14	Results 2014–15	Results 2015–16
Compliance					
Verification: upon completion of the verification activity, the CNSC will:					
Issue Type I Inspection Preliminary Report	**At the Type I Inspection Exit Meeting**	**100%**	100%	100%	100%
Issue Type I Inspection Report	**Within 60 business days**	**80%**	83%	90%	96%
Issue Type II Inspection Report	**Within 40 business days** [4]	**80%**	91%	94%	90%
Issue Desktop Review Report	**Within 60 business days**	**90%**	92%	95%	96%

[4] Power reactor licensees are provided 10 working days beyond the exit meeting to supply supplemental information; the above results take into consideration this allowance.

Enforcement: Upon a decision about an Order is made, the CNSC will:					
Provide the decision in writing on whether to confirm, amend, revoke or replace the Order (see *CNSC Rules of Procedures*)	**Within 10 business days**	**100%**	100%	100%	100%
Licensing: For applications pertaining to a new licence, renewal, amendment, or deviation, the CNSC will					
Issue a licensing decision when a public hearing is not required	**Within 80 business days**	**80%**	98%	93%	97%
Issue a licensing decision when a public hearing is required [5]	**Within 160 business days**	**90%**	100%	100%	100%

Activity	Performance Standard	Target %	Results %	Results %	Results %	Results %	Results %
			2011–12	2012–13	2013–14	2014–15	2015–16
Access to Information							
Respond to requests under the *Access to Information Act* (ATI) and *Privacy Act*	Within legislated time periods as stated in the acts	100	ATI - 86; Privacy - N/A	ATI - 66; Privacy - N/A	ATI - 53;[6] Privacy - 66	ATI Act 81% *Privacy Act* – no PA requests closed during reporting period. Only one request received at the end of fiscal year and was carried over into the next.	ATI Act 86% *Privacy Act* 89%.
Place public hearing notices	Within deadlines stipulated in the regulations	100	100	100	100	100	100

[5] The hearing process does not apply to licensing and certification activities that are related to nuclear substances, radiation devices, Class II facilities, prescribed equipment, transport and packaging.

[6] The results for 2013-14 were lower due to increased volume and complexity of ATI requests.

Follow the appropriate standard for response time to public inquiries	Same-day acknowledgement, with response time for completion of the request depending upon complexity:	100	100	100	100	100	100
	Low - same day	100	100	100	100	100	100
	Medium - within 5 business days	100	95	95	95	100	95
	High - within 10 business days	100	90	95	93	95	97

In addition to the above External Performance Standards, the CNSC publishes Service Standards for high-volume regulatory authorizations[xxv] related to licence applications for nuclear substances and radiation devices, Class II nuclear facilities and prescribed equipment, import or export, applications for certification of exposure device operators, and transport licence applications.

Federal Tax Expenditures

The tax system can be used to achieve public policy objectives through the application of special measures such as low tax rates, exemptions, deductions, deferrals and credits. The Department of Finance Canada publishes cost estimates and projections for these measures annually in the Report of Federal Tax Expenditures.[xxvi] This report also provides detailed background information on tax expenditures, including descriptions, objectives, historical information and references to related federal spending programs. The tax measures presented in this report are the responsibility of the Minister of Finance.

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Appendix: Definitions

appropriation (*crédit*): Any authority of Parliament to pay money out of the Consolidated Revenue Fund.

budgetary expenditures (*dépenses budgétaires*): Operating and capital expenditures; transfer payments to other levels of government, organizations or individuals; and payments to Crown corporations.

Departmental Performance Report (*rapport ministériel sur le rendement*): Reports on an appropriated organization's actual accomplishments against the plans, priorities and expected results set out in the corresponding Reports on Plans and Priorities. These reports are tabled in Parliament in the fall.

full-time equivalent (*équivalent temps plein*): A measure of the extent to which an employee represents a full person-year charge against a departmental budget. Full-time equivalents are calculated as a ratio of assigned hours of work to scheduled hours of work. Scheduled hours of work are set out in collective agreements.

Government of Canada outcomes (*résultats du gouvernement du Canada*): A set of 16 high-level objectives defined for the government as a whole, grouped in four spending areas: economic affairs, social affairs, international affairs and government affairs.

Management, Resources and Results Structure (*Structure de la gestion, des ressources et des résultats*)**:** A comprehensive framework that consists of an organization's inventory of programs, resources, results, performance indicators and governance information. Programs and results are depicted in their hierarchical relationship to each other and to the Strategic Outcome(s) to which they contribute. The Management, Resources and Results Structure is developed from the Program Alignment Architecture.

non-budgetary expenditures (*dépenses non budgétaires*): Net outlays and receipts related to loans, investments and advances, which change the composition of the financial assets of the Government of Canada.

performance (*rendement*)**:** What an organization did with its resources to achieve its results, how well those results compare to what the organization intended to achieve, and how well lessons learned have been identified.

performance indicator (*indicateur de rendement*): A qualitative or quantitative means of measuring an output or outcome, with the intention of gauging the performance of an organization, program, policy or initiative respecting expected results.

performance reporting (*production de rapports sur le rendement*): The process of communicating evidence-based performance information. Performance reporting supports decision making, accountability and transparency.

planned spending (*dépenses prévues*): For Reports on Plans and Priorities (RPPs) and Departmental Performance Reports (DPRs), planned spending refers to those amounts that receive Treasury Board approval by February 1. Therefore, planned spending may include amounts incremental to planned expenditures presented in the Main Estimates.

A department is expected to be aware of the authorities that it has sought and received. The determination of planned spending is a departmental responsibility, and departments must be able to defend the expenditure and accrual numbers presented in their RPPs and DPRs.

plans (*plan*): The articulation of strategic choices, which provides information on how an organization intends to achieve its priorities and associated results. Generally a plan will explain the logic behind the strategies chosen and tend to focus on actions that lead up to the expected result.

priorities (*priorité*)**:** Plans or projects that an organization has chosen to focus and report on during the planning period. Priorities represent the things that are most important or what must be done first to support the achievement of the desired Strategic Outcome(s).

program (*programme*)**:** A group of related resource inputs and activities that are managed to meet specific needs and to achieve intended results and that are treated as a budgetary unit.

Program Alignment Architecture (*architecture d'alignement des programmes*)**:** A structured inventory of an organization's programs depicting the hierarchical relationship between programs and the Strategic Outcome(s) to which they contribute.

Report on Plans and Priorities (*rapport sur les plans et les priorités*): Provides information on the plans and expected performance of appropriated organizations over a three-year period. These reports are tabled in Parliament each spring.

results (*résultat*): An external consequence attributed, in part, to an organization, policy, program or initiative. Results are not within the control of a single organization, policy, program or initiative; instead they are within the area of the organization's influence.

statutory expenditures (*dépenses législatives*): Expenditures that Parliament has approved through legislation other than appropriation acts. The legislation sets out the purpose of the expenditures and the terms and conditions under which they may be made.

Strategic Outcome (*résultat stratégique*): A long-term and enduring benefit to Canadians that is linked to the organization's mandate, vision and core functions.

sunset program (*programme temporisé*): A time-limited program that does not have an ongoing funding and policy authority. When the program is set to expire, a decision must be made whether to continue the program. In the case of a renewal, the decision specifies the scope, funding level and duration.

target (*cible*): A measurable performance or success level that an organization, program or initiative plans to achieve within a specified time period. Targets can be either quantitative or qualitative.

voted expenditures (*dépenses votées*): Expenditures that Parliament approves annually through an Appropriation Act. The Vote wording becomes the governing conditions under which these expenditures may be made.

Whole-of-government framework (*cadre pangouvernemental*): Maps the financial contributions of federal organizations receiving appropriations by aligning their Programs to a set of 16 government-wide, high-level outcome areas, grouped under four spending areas.

Endnotes

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xvi International Atomic Energy Agency, *Operational Safety Services, OSART – Operational Safety Review Team*, http://www-ns.iaea.org/reviews/op-safety-reviews.asp#osart

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